

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A flow field plate for a fuel cell or electrolyser, comprising a matrix flow field comprising an array of lands, the array of lands defining a network of interconnected fluid diffusion channels, wherein the array of lands further defines one or more branched primary fluid delivery/removal channels feeding narrower secondary wider than the fluid diffusion channels and connected thereto defined by an array of lands forming a network of interconnected fluid diffusion channels therebetween.

2. (Original) A flow field plate, as claimed in Claim 1, in which the flow field comprises a tiled array of flow field segments defining a reactant flow field, each segment comprising one or more branched primary fluid delivery/removal channels feeding narrower secondary fluid diffusion channels defined by an array of lands forming a network of interconnected fluid diffusion channels therebetween.

3. (Original) A flow field plate as claimed in Claim 2, in which the flow field segments are arranged in parallel.

4. (Original) A flow field plate as claimed in Claim 2, in which the flow field segments are arranged in series.

5. (Original) A flow field plate as claimed in Claim 2, in which the flow field segments are arranged as a parallel assembly of series connected flow field segments.

6. (Original) A flow field plate as claimed in Claim 2, in which the flow field segments are arranged as a series assembly of parallel connected flow field segments.

7. (Previously presented) A flow field plate, as claimed Claim 6, in which the branched primary fluid delivery/removal channels comprise a hexagonal network of channels.

8. (Cancelled)

9. (Cancelled)

10. (Previously presented) A flow field plate, as claimed in Claim 1, in which the lands are shaped to define fluid diffusion channels having substantially constant width.

11. (Previously presented) A flow field plate, as claimed in Claim 1, in which the lands are shaped to define fluid diffusion channels having a variable channel width.

12.(Previously presented) A flow field plate, as claimed in Claim 11, in which the lands are non-circular and the shape of the individual lands differs from the symmetry of the

arrangement of a group of lands, thereby defining fluid diffusion channels having a variable width.

13. (Cancelled)

14. (Original) A flow field plate, as claimed in Claim 10, in which the lands are polygonal in form.

15. (Original) A flow field plate, as claimed in Claim 14, in which the lands are hexagonal in form.

16. (Previously presented) A flow field plate, as claimed in Claim 1, in which the flow field comprises impermeable barriers separating regions of the flow field and with apertures in or defined by the impermeable barriers providing choke points for the passage of fluid.

17. (Previously presented) A flow field plate, as claimed in Claim 1, in which the fluid delivery/removal channels and the fluid diffusion channels are gas delivery/removal channels and gas diffusion channels respectively.

18. (Original) A flow field plate, as claimed in Claim 17, in which lands are provided in the gas delivery/removal channels to resist ingress in use of a gas diffusion layer into channels of the flow field.

19. (Previously presented) A fuel cell comprising one or more flow field plates in accordance with Claim 1.

20. (Original) A fuel cell as claimed in Claim 19, in which the power deliverable by each flow field plate is in excess of $750\text{mW}\cdot\text{cm}^{-2}$ calculated on the working surface of the flow field.

21. (Previously presented) A flow field plate, as claimed in Claim 1, wherein the flow field plate is a separator.